What is claimed:

1. A radio receiver, comprising:

an envelope detector configured to detect the amplitude of a received signal and generate a waveform representative of the envelope of the received signal; and

a sign detector configured to determine a sign associated with a data bit encoded on the received signal.

2. The radio receiver of claim 1, further comprising a filter coupled with the envelope detector, the filter configured to filter the waveform generated by the envelope detector.

3. The radio receiver of claim 2, further comprising an analog-to-digital converter coupled to the filter, the analog-to-digital converter configured to convert the filtered waveform to a digital signal.

4. The radio receiver of claim 2, wherein the filter is a low pass filter.

5. The radio receiver of claim 4, wherein the filter is further configured to provide DC removal for the waveform.

6. The radio receiver of claim 1, wherein the sign detector comprises a limiter configured to generate a resulting bit stream.

7. The radio receiver of claim 6, wherein the sign detector further comprises circuitry coupled with the limiter, the circuitry configured to detect a double positive, or double negative, in the resulting bit stream.

8. A receiver, comprising:

an antenna configured to receive a RF signal;

a filter coupled to the antenna, the filter configured to filter the received RF signal;

a amplifier coupled with the filter, the amplifier configured to amplify the filtered RF signal; and

a radio receiver coupled with the amplifier, the radio receiver comprising:

an envelope detector configured to detect the amplitude of a received signal and generate a waveform representative of the envelope of the received signal; and

a sign detector configured to determine a sign associated with each data bit encoded on the received signal.

9. The receiver of claim 8, wherein the radio receiver further comprises a filter coupled with the envelope detector, the filter configured to filter the waveform generated by the envelope detector.

10. The receiver of claim 9, wherein the radio receiver further comprises an analog-to-digital converter coupled to the filter, the analog-to-digital converter configured to convert the filtered waveform to a digital signal.

11. The receiver of claim 9, wherein the filter is a low pass filter.

12. The receiver of claim 11, wherein the filter is further configured to provide DC removal for the waveform.

13. The receiver of claim 8, wherein the sign detector comprises a limiter configured to generate a resulting bit stream.

14. The receiver of claim 13, wherein the sign detector further comprises circuitry coupled with the limiter, the circuitry configured to detect a double positive, or double negative, in the resulting bit stream.

15. The receiver of claim 8, wherein the amplifier is a low noise amplifier.

16. The receiver of claim 8, wherein the filter coupled to the antenna is a band pass filter.

17. The receiver of claim 8, further comprising baseband circuitry configured to receive the digital signal from the analog-to-digital converter and sign information from the sign detector and to decode the data bits base don't eh digital signal and sign information.

18. A method of receiving data in a wireless communication network, comprising:

receiving an RF signal;

generating a waveform based on the envelope associated with the received RF signal; and

detecting a sign for data bits encoded on the received RF signal.

19. The method of claim 18, further comprising filtering the received RF signal and amplifying the received RF signal.

20. The method of claim 19, wherein filtering the received RF signal comprises band pass filtering the received RF signal.

21. The method of claim 19, wherein amplifying the received RF signal comprises using a low noise amplifier to amplify the received RF signal.

22. The method of claim 18, further comprising low pass filtering the waveform generated based on the envelope associated with the received RF signal.

23. The method of claim 22, further comprising converting the filtered waveform to a digital signal.

24. The method of claim 23, further comprising decoding the data bits encoded on the received RF signal using the digital signal and sign information related to the data bits.

25. A radio receiver, comprising:

a band pass filter configured to filter a combined signal;

a clocked comparator coupled with the band pass filter, the clocked comparator configured to compare the filter combined signal to a ground reference when the comparator is enabled by a clock signal;

a digital-to-analog converter coupled with the clocked comparator, the digital-to-analog converter configured to convert the output of the clocked comparator to an analog signal; and

a combiner configured to receive a RF signal and combine it with the analog signal generated by the digital-to-analog converter in order to generate the combined signal.

26. The radio receiver of claim 25, further comprising filtering and decimation circuitry configured to filter and decimate the output of the clocked comparator.

27. The radio receiver of claim 25, further comprising a clock signal configured to clock the clocked comparator at a rate required to achieve a selected effective number of bits at the output of the filtering and decimation circuitry.

28. The radio receiver of claim 25, wherein the combiner is a passive combiner.

29. The radio receiver of claim 25, further comprising a plurality of clocked comparators coupled to the band pass filter, each of the clocked comparators configured t be activated on a different phase of a clock signal and a

combiner coupled to the plurality of clocked comparators, the combiner configured to combine the outputs of the clocked comparators.

30. The radio receiver of claim 29, wherein the digital-to-analog converter is coupled to the plurality of clocked comparators via the combiner.

31. A receiver, comprising:

an antenna configured to receive a RF signal;

a filter coupled to the antenna, the filter configured to filter the received RF signal;

a amplifier coupled with the filter, the amplifier configured to amplify the filtered RF signal; and

a radio receiver, comprising:

a band pass filter configured to filter a combined signal;

a clocked comparator coupled with the band pass filter, the clocked comparator configured to compare the filter combined signal to a ground reference when the comparator is enabled by a clock signal;

a digital-to-analog converter coupled with the clocked comparator, the digital-to-analog converter configured to convert the output of the clocked comparator to an analog signal; and

a combiner configured to receive a RF signal and combine it with the analog signal generated by the digital-to-analog converter in order to generate the combined signal.

32. The receiver of claim 31, wherein the radio receiver further comprises filtering and decimation circuitry configured to filter and decimate the output of the clocked comparator.

33. The receiver of claim 31, wherein the radio receiver further comprises a clock signal configured to clock the clocked comparator at a rate required to achieve a selected effective number of bits at the output of the filtering and decimation circuitry.

34. The receiver of claim 31, wherein the combiner is a passive combiner.

35. The receiver of claim 31, wherein the radio receiver further comprises a plurality of clocked comparators coupled to the band pass filter, each of the clocked comparators configured t be activated on a different phase of a clock signal and a combiner coupled to the plurality of clocked comparators, the combiner configured to combine the outputs of the clocked comparators.

36. The receiver of claim 35, wherein the digital-to-analog converter is coupled to the plurality of clocked comparators via the combiner.

37. A method A method of receiving data in a wireless communication network, comprising:

band pass filtering a combined signal;

generating a digital signal form the filtered combined signal by comparing the filtered combined signal to a ground reference;

converting the digital signal to an analog signal; and

combining the analog signal with a received RF signal in order to generate the combined signal.

38. The method of claim 37, further comprising comparing the combined signal to the ground reference at a rate designed to produce a selected effective number of bits from the combined signal.